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REMARKS

In the Office Action, claims 7-12 are rejected as being indefinite under 35 U.S.C. § 112, second paragraph, and as being anticipated by U.S. Patent No. 5,369,148 to Takahashi et al under 35 U.S.C. § 102(b). In response, claims 7 and 10 are amended. Thus, the pending claims under consideration in this application are claims 7-12, with claim 7 being the sole independent claim.

Claim 7 is amended to overcome the rejections under 35 U.S.C. § 112. Specifically, claim 7 is amended to clarify the storing process and the process steps of heating or maintaining the temperature of the surface of the storage apparatus while storing the particulate water-absorbent resin. As amended, the claims are submitted to be in proper form under 35 U.S.C. § 112, second paragraph.

Rejection Under 35 U.S.C. § 102(b)

Claims 7-12 are rejected as being anticipated by U.S. Patent No. 5,369,148 to Takahashi et al. Takahashi et al. is cited as allegedly disclosing the claimed invention. However, it is noted that the Action does not identify which features of the claimed invention are disclosed in Takahashi et al. or where Takahashi et al. allegedly disclose the claimed invention.

The claimed invention is directed to a process for storing pulverized particulate water-absorbing resin where the particulate water-absorbent resin is stored in a storage apparatus by 1) externally heating a surface of the storage apparatus that contacts the resin, 2) maintaining the surface of the storage apparatus that contacts the resin at a temperature of 30-150°C, or 3) maintaining the surface of the apparatus that contacts the resin above a temperature that is 20

°C below the temperature of the particulate water-absorbent resin. Takahashi et al. does not disclose or suggest these features of the claimed invention.

Takahashi et al. fails to disclose or suggest a process for storing a water-absorbent resin. Takahashi et al. further fails to disclose the process steps of maintaining the surface of the storage apparatus within the claimed temperature ranges during storage.

Takahashi et al., which is disclosed on page 3 of the specification, is directed to a method for the continuous agglomeration of an absorbent resin powder. In contrast to Takahashi et al., the claimed invention is directed to a process to inhibit agglomeration of the water-absorbent resin during storage as disclosed on page 16, lines 7-15 of the specification. As disclosed therein, the present invention heats or maintains the surface temperature of the storage apparatus to prevent the agglomeration of the dry, pulverized water-absorbent resin.

Takahashi et al. discloses a method of spraying a liquid into a chute or tube simultaneously with an absorbent resin powder for the purpose of causing agglomeration. The apparatus of Takahashi et al. includes a cylindrical tube where the absorbent resin powder and liquid material are passed continuously through the cylindrical member. The cylindrical member forms a mixing chamber or chute for the absorbent resin powder and the liquid material. The cylindrical member is not a storage apparatus and is not capable of storing a dry resin product. Takahashi et al. does not disclose a process for storing a dry particulate water-absorbent resin in the cylindrical member or in a storage apparatus.

In the present invention, the dry-particulate water-absorbent resin is a free flowing powder that preferably has a particle size not greater than 850 μm . As disclosed in Examples 3-6 and on page 22, lines 3-6 of the specification, the particle size of the particulate water-absorbent resin of the Examples was substantially not greater than 850 μm and not smaller than 150 μm .


As disclosed in Takahashi et al. and page 3 of the specification, the step of mixing the absorbent resin powder with liquid produces a highly adhesive agglomerate that easily adheres to the surfaces of the mixing device. Therefore, Takahashi et al. discloses heating the cylindrical mixing member to prevent the liquid-treated resin powder from adhering to the surface of the cylindrical member. Takahashi et al. provides no suggestion of heating or maintaining the surface temperatures of a storage apparatus for storing a dry particulate water-absorbent resin powder. Accordingly, the claims are not anticipated by Takahashi et al.

Takahashi et al. also fails to disclose a storage process for a surface crosslinked particulate water-absorbent resin as in claim 8, where the surface crosslinked particulate water-absorbent resin contains a polyhydric alcohol as in claim 9, or the particulate resin having an absorption capacity under load of not less than 18 g/g as in claim 10 in combination with the process of claim 7. Takahashi et al. also fails to disclose a crosslinked partially-neutralized polycarboxylic acid resin as in claim 11 in combination with the steps of claim 7. Thus, claims 8-11 are not anticipated.

As discussed above, Takahashi et al. mixes the liquid material with the absorbent resin in the cylindrical member. Thus, Takahashi et al. does not disclose a dry water-absorbent resin product obtained by drying at 160-250 °C as in claim 12 and storing the dry resin product in the storage apparatus as in claim 7. Accordingly, claim 12 is not anticipated.

In view of the above comments, reconsideration and allowance are requested.

Respectfully submitted,



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